

## REMARKS

This Paper and the accompanying Request for Continued Examination are submitted in response to the Advisory Action dated September 20, 2006 and in further response to the final Office Action mailed July 27, 2006 having a shortened statutory response period ending on October 27, 2006. This Paper is submitted within the shortened statutory response period. The Commissioner is hereby authorized to charge the \$790.00 RCE fee and any additional fees to Deposit Account number 02-1818.

Claims 1-21 and 23-53 are currently pending in this application. Claims 22 and 54-120 have been canceled.

Claims 1-21, 23-34, and 48-53 were rejected under 35 U.S.C. §103(a) for allegedly being obvious over U.S. Patent No. 5,935,847 to Smith et al. (*Smith*) in view of U.S. Patent No. 6,759,245 to Toner et al. (*Toner*). Claims 36-46 were rejected under 35 U.S.C. § 103(a) over *Smith* in view of *Toner* and in further view of U.S. Patent No. 5,989,215 to Delmotte (*Delmotte*). Applicants respectfully disagree with and traverse these alleged rejections for the reasons set forth below.

*Smith*, *Toner*, and *Delmotte*, either alone or in combination, do not disclose or suggest a cell culture container having opposing flexible exterior sidewalls, one of the sidewalls being gas permeable, and a fibrin matrix layer on a portion of an interior sidewall surface as recited in the present claims. *Smith* has no disclosure whatsoever regarding fibrin, let alone a container having a fibrin layer. In fact, the Examiner has admitted the same. See Office Action dated July 27, 2006 at ¶ 1.

*Toner* fails to fulfill this deficiency of *Smith* as *Toner* teaches away from a container having flexible exterior sidewalls as recited in the present claims. *Toner* discloses a bioreactor with multiple cartridges. Each cartridge includes rigid and gas impermeable exterior walls 50. *Toner*, col. 7 lines 54-59, see also Figure 8a. Thus, *Toner*'s cartridge having rigid and gas impermeable exterior walls teaches away from the cell culture container having flexible and gas permeable exterior sidewalls as recited in the present claims. Teaching away is a *per se* demonstration of non-obviousness. *In re Dow Chemical Co.*, 837 F.2d 469 (Fed. Cir. 1988). Consequently, any combination of *Toner* with *Smith* and/or *Delmotte* with is likewise *per se* non-obvious.

Moreover, the Examiner's contention that *Toner* only teaches "the ability of fibrin to stimulate cell immobilization" fails to consider the *Toner* reference as a whole. *See* Advisory Action dated September 20, 2006. To simply ignore the exterior structure of *Toner*'s bioreactor cartridges 1) fails to consider the entire structure of *Toner*'s cartridge and 2) is clear evidence that the Examiner is using the Applicant's own disclosure as a template to piece together isolated portions of the prior art in order to deprecate Applicant's claims. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988); *In re Fritch*, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Such a contention demonstrates hindsight reasoning and is improper as a matter of law.

No motivation exists to combine *Delmotte* with *Smith*. *Smith* discloses a flexible container and has no disclosure whatsoever directed to fibrin, let alone a container having a fibrin layer. *Delmotte* has no disclosure whatsoever directed to a flexible container. Rather, *Delmotte* discloses a dual chamber fibrin delivery device having a first rigid chamber and a second rigid chamber. One of ordinary skill in the art would recognize that each chamber is rigid to ensure the pressurized removal (vis-à-vis fluid pressurizer 22 or plunger 32) of fibrinogen and thrombin from each respective chamber. *Delmotte*, col. 8 lines 31-42, col. 9 lines 53-68, Figures 1 and 4. Consequently, no motivation exists to combine *Smith*'s fibrin-free flexible container with *Delmotte*'s rigid fibrin delivery device.

In summation, *Smith* has no disclosure of a cell culture container having a fibrin layer as admitted by the Examiner. *Toner*'s disclosure of a bioreactor cartridge with rigid and gas impermeable exterior walls teaches away from the cell culture container having flexible and gas permeable sidewalls as recited in the present claims. No motivation exists to combine *Smith*'s fibrin-free flexible container with *Delmotte*'s rigid fibrin delivery device.

**CONCLUSION**

In view of the foregoing remarks, Applicants submit that claims 1-21 and 23-53 are in a condition for allowance and respectfully request a notice of the same.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

~~BY~~ 

Ted J. Barthel  
Reg. No. 48,769  
Customer No. 29200

Dated: October 27, 2006